

CLAIMS

What is claimed is:

1. A thermoplastic composition comprising (a) from 1 to 99 percent by weight of the total composition of at least thermoplastic polymer, and (b) from 1 to 99 percent by weight of the total composition of at least one low viscosity, homogeneously branched ethylene polymer having a density from 0.855 g/cc to 0.899 g/cc.
2. The composition of Claim 1 in which the viscosity of the ethylene polymer is a Brookfield viscosity of at least 500 cPs at 350°F.
3. The composition of Claim 2 in which the ethylene polymer is a substantially linear ethylene/ α -olefin copolymer.
4. The composition of Claim 2 in which the thermoplastic polymer is selected from the group consisting of synthetic rubbers, LLDPE, HDPE, LDPE, EVA copolymer, ethylene-carboxylic acid copolymer, ethylene acrylate copolymer, polybutylene, polybutadiene, nylon, polycarbonate, polyester, polypropylene, ethylene-propylene interpolymer, ethylene-propylene-diene monomer rubber, chlorinated polyethylene, thermoplastic vulcanate, EAA, ESI, polyurethane, or a graft-modified olefin polymer, and combinations of two or more of these polymers.
5. The composition of Claim 2 in which the composition comprises at least 50 wt% of the thermoplastic polymer.

6. The composition of Claim 3 in which the substantially linear ethylene interpolymer has a density in the range of 0.860 to 0.880 g/cc.

7. The composition of Claim 3 in which the styrene block copolymer is selected
5 from the group consisting of styrene/butadiene/styrene, styrene/isoprene/styrene, styrene/ethylene-butene/styrene and styrene/ethylene propylene/styrene.

8. A film, fiber, coating or molded article comprising the composition of Claim 2.

10 9. A thermoplastic blend composition comprising;

A) from 75 to 99 weight percent (based on the total weight of the thermoplastic blend composition) of a thermoplastic polyolefin composition comprising;

15 (a) from 50 to 100 wt percent of polypropylene or HDPE or a mixture thereof; and

(b) from 0 to 50 wt percent of an ethylene/ α -olefin interpolymer having a density of less than or equal to 0.9130 g/cm³; and

20 B) from 1 to 25 weight percent (based on the total weight of the thermoplastic blend composition) of an extender comprising an ethylene/ α -olefin interpolymer other than component A) (b) and having;

(a) a density of less than 0.8990 g/cm³; and

(b) a Brookfield Viscosity at 350°F of at least 500 cP's;

and wherein the melt index of said thermoplastic blend composition is increased by at least 5% relative to that of said thermoplastic polyolefin composition.

10. The thermoplastic blend composition of Claim 9 wherein;

5 A) said thermoplastic polyolefin composition is present in an amount from 80 to 98 weight percent (based on the total weight of the thermoplastic blend composition); and

B) said extender comprising an ethylene/ α -olefin interpolymers other than component A) (b) is present in an amount of from 2 to 20 weight percent (based on the total weight of the thermoplastic blend composition) and has;

(a) a density of less than 0.8900 g/cm^3 ; and

10 (b) a Brookfield Viscosity at 350°F of at least 500 cP's but less than 70,000 cP's;

and wherein the melt index of said thermoplastic blend composition is increased by at least 10% relative to that of said thermoplastic polyolefin composition.

15 11. The thermoplastic blend composition of Claim 9 wherein;

A) said thermoplastic polyolefin composition is present in an amount from 85 to 97 weight percent (based on the total weight of the thermoplastic blend composition); and

20 B) said extender comprising an ethylene/ α -olefin interpolymers other than component A) (b) is present in an amount of from 3 to 15 weight percent (based on the total weight of the thermoplastic blend composition) and has;

(a) a density of less than 0.8800 g/cm^3 ; and

(b) a Brookfield Viscosity at 350°F of at least 500 cP's but less than 40,000 cP's;

and wherein the melt index of said thermoplastic blend composition is increased by at least 15% relative to that of said thermoplastic polyolefin composition.